A "Career" In the Patent Office

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I have entitled this paper "A Career in the Patent Office" when perhaps it should have had the interrogative heading—What possibilities for a career are there in the Patent Office for an ambitious young man?

It is the purpose of this paper to look into this question somewhat and point out features in office work, which doubtless have appealed to some men, and which may appeal to others. Many instances have been known of men who have rounded out years of service in the Patent Office and retired satisfied with what they have done. Most of us entered the Examining Corps from choice and some have remained from choice.

It is quite true that many from the moment of their entry plan to use their office training as a stepping stone to Patent Law Practice; also that the number of Examiners leaving the office for outside work has been large for many years, so large, in fact, as seriously to engage the attention of the Commissioner, the efficiency of the corps as a whole being imperilled by these losses. In the report recently prepared by Mr. Boyle and Mr. Ulke, concerning the German Patent Office, it was said, "Examiners never resign from that office for the purpose of practising before the same, as such a practice is held to be ethically bad."

It is not intended to disparage the opportunities for a career there are in practising before the office, much less those in practising before the courts. We all know that very many men have attained professional and financial success in both of these channels.

We may, however, pause for a moment to compare the work of Examining applications for patents with the work of preparing and prosecuting these applications.

With possibly the exception that the latter is more

varied in subject-matter and therefore more interesting, the advantage, in my opinion, lies with the work of examining. What the latter lacks in variety, it makes up in concentration and thoroughness of attention on one or more arts. And a thorough knowledge of any art is not so very narrow as to field, as I shall endeavor to point out a little later.

The Examiner's duties are judicial in nature; an attorney or solicitor is an advocate. If a man's mind tends to the judicial, he will enjoy deciding questions rather than pleading them.

I am told the solicitor's complete enjoyment of his work is sometimes marred by the peculiar mental processes of the inventor, or the failure of the latter to understand the utility of the Rules of Practice. The Examiner in dealing with the attorney can usually confine his attention to the merits of the case.

Deciding a question must always be considered as important work as the advocacy of either side thereof, and an able judge is not reckoned inferior to an able advocate.

Patent Office work has always appealed to me because it presents ever changing views of the advance in the industrial arts, the constructive thoughts of inventors from all over the world. The Patent Office is a sort of clearing house for ideas. If an inventor comes in with more credits in his application than there are debits charged against him in the patents, publications, etc., of others, he goes out with his credit balance in the form of a patent. His patent exhibits his contribution to the art and to watch these contributions grow, to observe the ever shifting lines of growth, to mark the different ways inventors take to reach the same goal, and to note how eagerly the advance made by one is seized upon by others, is like watching a battle from a point of vantage, seeing all operations pass in review. The Examiner occupies this point of vantage relative to the march of progress of the industrial arts. He is, as it were, at the center of things and assuming he is interested, he must appreciate and enjoy the advantages of his position.

But I wish particularly to point out how his enjoyment of his position may be made greater, his efficiency therein increased and the position itself made more important.

These results may all be accomplished by the Examiner thoroughly knowing his art.

The Examiner who "knows his art" as this expression is used in the office, is not without honor among his associates. He is, for instance, a bad man to run up against in trying to transfer a case unwarrantably into his class.

But to know an art thoroughly in the ideal sense means more than a knowledge of the subject-matter of each sub-class with perhaps a full acquaintance with a comparatively few prominent patents.

It means a knowledge of how the art has grown; of the inventors who have worked most assiduously therein and their lines of endeavor; of the publications, commercial and otherwise, relating thereto; of related arts in so far as they affect his art. It involves, of course constant examination of patents and publications; it requires the attention to be always alert to see matters bearing on the subject. It should include a practical acquaintance with the more active and prominent manufacturing establishments connected with the art, and if the Examiner could personally meet and know the inventors most active in the art, the acquaintance would be of great assistance to him.

To digress for a moment, I believe more opportunities should be given the Examiners to visit industrial establishments than are now possible, for only in this way can a practical view be gained of many arts.

A man comes into the office fresh from college with a knowledge of the industries of the country limited to his study of books to pass the entrance examination in technics. He is placed, for instance, in Division 34, when he doesn't know enough about practical railroad structures to tell the difference, to use an old expression, between a split switch and pot of red paint. Yet that man will soon have to pass judgment on the usefulness or operativeness of some device gotten up possibly by the master mechanic of some railroad.

And in other lines of work it is the same way.

If an Examiner is ambitious to know his art, the Government should assist to the extent of giving him an occasional inspection trip to factories, etc., directly related thereto, especially as the principle is officially recognized in other Governmental Departments.

The appropriation for books and periodicals should be larger than it now is that the complete record of progress made along industrial lines may be consulted and further information gained.

But to come back to "knowledge of an art:" I said above that this is not a narrow field. Perhaps, this can best be illustrated by inspecting a particular art. Take, for example, the art of paper making, excluding things made of paper and including wood pulp making.

The industry is a large one, the United States Census of 1910 gives for the year 1909, 538 establishments making paper only; 81 establishments making pulp only; 158 making paper and pulp; altogether 777 establishments in the United States with a capitalization, in round numbers, of 409 million dollars. Thirty-one States were represented in the industry. But the art is not bounded by the United States, and a knowledge thereof must include the varied use of many different materials to produce wood pulp and paper in a great variety of forms throughout all countries practising the industry.

Wood pulp is made mechanically as ground wood; chemically as soda pulp, sulphite pulp, sulphate pulp, etc. according to the chemicals used. Many different processes are employed and considerable machinery involved in making wood pulp, including machines for reducing the wood, digesters with accompanying apparatus for producing sulphite, washing and screening apparatus and presses for forming the pulp into dry or semi-dry sheets. The recovery of spent liquor and by-products from the digesting operation is a large and increasing industry as it is possible and profitable to manufacture many chemical substances from the resinous and non-fibrous constituents of the wood, all of which when carried on in connection with the digesting operation is really a part of the pulp making art.

Paper pulp is, of course, made from various materials besides wood. Almost any plant containing cellulose in large amount is availed of, such as cotton, flax, hemp, ramie, manilla, jute, bagasse, bamboo, esparto, and straw. The employment of each of these involves separate processes and machinery. The bleaching of the pulp is an important accessory.

When it comes to making paper from pulp, more and

different processes and machines are employed. The pulp has to be beaten up in beating engines, filler or size added, and the material screened before it is ready for the foudrinier machine or its equivalent. Then comes the finishing or calendering operation and if the paper is a special kind, then follows the coating for art papers, or impregnating for blue print, medicated and cheque papers. A special branch is the preparing of clean paper pulp from waste paper, and a related art is the making of constructive materials having a base of fibre pulp such as papier-mache, vulcanized board, and roofing sheets.

From this sketch of the art of paper making, it will be seen a wide field of study may be involved before complete knowledge thereof is gained. Other arts are doubtless more extended.

Is not the field large enough to inspire one's ambition to be an expert therein? This is an age of specialists, and, to my mind, a specialist in the field of any industrial art is as honorable as a specialist in medicine or even in the law. So therefore I commend this object to you.

When it is taken into consideration that in addition to proficiency in the mechanic arts, there is imposed on members of the Examining Corps, a necessity for knowing thoroughly the patent law, as the same may apply to the granting of patents, there is left no room to doubt that the well trained patent Examiner is deserving of being called a Government expert. I shall not enlarge upon the legal knowledge the Examiner should have; the impressiveness of this feature being doubtless brought home to your attention by other papers read before you.

I will not dwell on the character of the examination to be passed before entrance to the corps is gained. Suffice it to say, this examination secures for the service as good raw material as enters any Government or other service of equal size.

I shall, however, venture to call to your attention the fact that the great majority of applications are finally adjudicated in the Examining Division and that many applicants prefer to rest their case with the Primary Examiners, rather than by appealing receive a patent with an adverse decision on record against it. In each Examining Division, are settled each day questions of

momentous importance to the industries of the country. A heavy responsibility rests on each man determining these questions and a constant realization of this fact must tend to make the Examiner take his work seriously and result in giving him an appreciation of the dignity of his position.

I will close with the suggestion that to be a member of the Examining Corps of the United States Patent Office is no small honor and that every man therein, and woman too, for that matter, should guard that honor and work to increase it.

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